

**REMARKS**

Claims 10-12 are currently pending in the present application.

Claims 10-12 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite due to antecedent basis and other clarity issues.

Claims 10-11 stand rejected under 35 U.S.C. § 102(b) as anticipated by EPO patent document EP 0 239 442. Claim 12 stands rejected under either § 102(b) or 35 U.S.C. § 103(a) as unpatentable over this reference.

The Applicants have amended claims 10-12 to more clearly recite the present invention, and to address the § 112, second paragraph, issues.

**1. The Claims Are Patentable Over the EPO Reference.**

The Applicants respectfully traverse the pending rejections of claims 10-12 over EP 0 239 442.

a. The Pending Rejections Are Insufficient Under the APA. As the first grounds of traverse, the Applicants respectfully request the pending rejections be withdrawn on the grounds that the rejection fails to meet the requirements of the Administrative Procedure Act (“APA”) for a “full and reasoned explanation” of the basis of the rejection.

In the pending § 102(b) rejection of claims 10-11, the Office Action states that “[t]he EPO search report indicated that claims 10 and 11 were rejected under 102 on [the EP 0 239 442] reference,” and that the Examiner “give[s] full faith and credit [to] the European examiner’s rejection.” September 30, 2003 Office Action at 3. In fact, there was no “rejection” by a European examiner.

The EP 0 239 442 reference is nothing more than a *search* report which does not contain any assessment of the patentability of any claim. Instead, this

reference merely lists documents “considered to be relevant,” which an examiner may consider during a subsequent examination. Further, there is no way to determine from EP 0 239 442 whether the claims in the European case correspond to the claims in the present case, and thus whether any analysis in the European case (had there been one) would be applicable to the examination of the present claims.

Because there was no “rejection” by a European examiner, there was nothing to which “full faith and credit” could be given in the present case – assuming in the first place that “full faith and credit” was an adequate substitute for a reasoned analysis of whether a reference teaches or suggests the present claims, which it is not. Accordingly, the presently unsupported § 102(b) and § 103(a) rejections should be withdrawn.

b. Claims 10-12 Are Patentable Over the EP 0239 442 Reference. As to the second grounds for traverse, the Applicants respectfully submit that the EP 0 239 442 reference does not disclose or suggest all the features of the present invention.

The present invention, as recited in claims 10-12, reflects the Applicants’ determination that improved adherence between a tube assembly of a certain geometry and heat-resistant block of a certain conforming geometry could be obtained by separate application of mortar to the tube assembly and to its conforming heat-resistant block, followed by joining of the mortar-coated tube assembly and mortar-coated block – preferably where a uniform mortar coating thickness is established on both the tube assembly and the conforming block prior to joining. Further, the Applicants noted that by efficiently removing

excess with a scraper guided on known reference surfaces before joining the parts, consistency in heat-resistant block adhesion could be substantially improved (due to minimizing worker-to-worker variance in mortar application), and production time and costs could be lowered (due to reduced need for skilled, labor-intensive “sculpting” of mortar layers to curved tube assembly and conforming block sections). Suitable reference surfaces disclosed in the present application include, for example, the top surfaces of adjacent tubes of the tube assembly, as shown in Figs. 13 and 14, and the “ridge” between adjacent tube-conforming sections of the heat-resistant block, as shown in Figs. 15 and 16. Thus, the Applicants have recited in claims 10-12 a lower cost, higher quality method of preparing and joining boiler tube assemblies and their corresponding conforming heat-resistant blocks.

In contrast, the EP 0 239 442 reference does not disclose or suggest all of the features of claims 10-12. At best, EP 0 239 442’s Figs. 1-7 and the English translation of its Abstract and claims merely refer to and illustrate the use of a “bonding material” to glue refractory components “to the walls of the combustion chambers of boilers.” EP 0 239 442 at 4:28-54 (Claims 1-6), Figs. 1-7. EP 0 239 442 is completely silent as to any disclosure or suggestion of the present invention’s assembly method. For example, there is no suggestion of:

- Claim 10’s separate application of mortar to corresponding surfaces of a tube assembly and a heat block, followed by joining to adhere these parts to one another;
- Claim 11’s application of mortar to *both* the space between the tubes *and* over the inner tube-conforming surface of the heat block (in fact, EP 0 239 442’s Figs. 4-6 do not disclose or suggest application of *any* bonding agent between a tube and its corresponding conforming heat block surface); or

- Claim 12's highly efficient approach to obtaining consistent, repeatable mortar thickness by drawing a mortar scraper along a known reference surface to obtain a desired mortar thickness and surface shape.

Because the EP 0 239 442 reference fails to disclose teach or suggest every specific feature of the present invention recited in claims 10-12, these claims are patentable over this reference under § 102(b) and § 103(a).

### CONCLUSION

In view of the foregoing amendments and remarks, the Applicants respectfully submit that claims 10-12 are now in allowable form. Early and favorable consideration and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #1684/44903DV).

December 30, 2003

Respectfully submitted,



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